

AUTHOR: Tsarev, M.N.

68-58-2-21/21

TITLE: In the Technical and Economic Board of the Stalino Sovnarkoz  
(V tekhniko-ekonomicheskem sovete stalinskogo sovnarkhoza)

PERIODICAL: Koks i Khimiya, 1958, Nr 2, p 63 (USSR)

ABSTRACT: The section of chemistry and processing of coal considered the problem of the development of processing coal in the Stalino administrative region. Members of the staff of coke oven works, chemical works, Donetskiy industrial'nyy institut (Donets Industrial Institute) and UKhIN (Ukrainian Scientific Research Coal-chemical Institute) participated in the discussion. Decisions regarding future development of the industry were taken: 1) To increase the participation of gas coals in coking blends. 2) Erection of new coke oven works. 3) Organisation of the recovery of by-products on coke oven works which can be used as raw materials for the production of organic synthesis and to erect factories for the production of plastics and synthetic rubber. 4) Donets Industrial Institute is to organise training of specialists for the industry of organic synthesis.

ASSOCIATION: Trest Uglepererabotka (Coal Processing Trust)

AVAILABLE: Library of Congress

Card 1/1

1. Coal - Processing - USSR

USCOMM-DC-54,900

SOV/68-59-7-6/33

AUTHORS: Tsarev, M.N. and Zheidev, A.P.

TITLE: Progressive Methods of Coal Beneficiation Should be Introduced More Rapidly

PERIODICAL: Koks i khimiya, 1959, Nr 7, pp 14 - 16 (USSR)

ABSTRACT: Plan of the development in the field of beneficiation of Donets coals during 1959 - 1965 is discussed. It is pointed out that in projects of beneficiation plants, which are going to be built during the above period, the designs often include old type of equipment. Therefore, many projects should be reconsidered. In order to equip new plants, serial production of some equipment (centrifuges Ufsm and Nvv-1000, automatic filter presses, screening plants GUK-K and GUK-O, separators for beneficiation in heavy media etc.) should be started. The need for wider application of beneficiation in heavy media is stressed.

ASSOCIATION: Stalinskiy sovnarkhoz (Stalino Sovnarkhoz)  
Card 1/1

SOV/68-59-9-13/22

AUTHORS: Tsarev, M.N., Shpakhler, A.G., Korchagin, L.V., Pluzhnik, V.I., Zel'din, B.B. and Bul'shteyn, B.M.

TITLE: Utilisation of Pitch and Pitch Distillates as Binders for Briquetting Coal Fines.

PERIODICAL: Koks i khimiya, 1959, Nr 9, pp 45 - 49 (USSR)

ABSTRACT: Binding properties of pitches from various works and the application of pitch distillates as binders in briquetting coal fines was investigated. It was established that the binding properties of pitches from various works (properties, Table 1) differ considerably. Binding properties of pitches were correlated with their crushing strength. With increasing crushing strength the quality of the briquettes improves. The crushing strength of pitch depends on the content of free carbon and insoluble in carbon disulphide residue. Physico-chemical properties of pitches depend mainly on the composition of coking blends and tar distillation conditions. Pitch produced from a blend containing an increased proportion of lean coals contain more carbon disulphide insoluble residue and possess poorer binding properties. Pitch produced by batch distillation possess lower mechanical strength and poorer

Card 1/3

SOV/62-59-9-13/22

Utilisation of Pitch and Pitch Distillates as Binders for Briquetting  
Coal Fines

binding properties than those produced on continuous distillation plants. Liquid pitch distillates cannot be used directly as binders (due to their low viscosity). Additions of 20 - 30% of pitch distillates to pitch increases the quality of the briquettes due to a decrease in the melting temperature of pitch and a more uniform coating of coal grains. Preparation of water emulsion from mixtures of pitch and liquid pitch distillate (Table 4) and its application as a binder improves the quality of the briquettes and decreases the consumption of pitch. Oxidation of liquid pitch distillate with air transfers it into the solid state with a softening temperature about 60°C. The product so obtained possesses high binding properties and if used in a proportion of 8 - 10% (of coal) can replace pitch. Water emulsion can be produced from the oxidation product which when applied as a binder improves the quality of the briquettes. Additions of pitch distillate to the coal permits decreasing the proportion of binder (pitch) by 10 - 12%, (Table 7).

Card 2/3

SOV/68-59-9-15/22

Utilisation of Pitch and Pitch Distillates as Binders for  
Briquetting Coal Fines

There are 7 tables and 6 Soviet references.

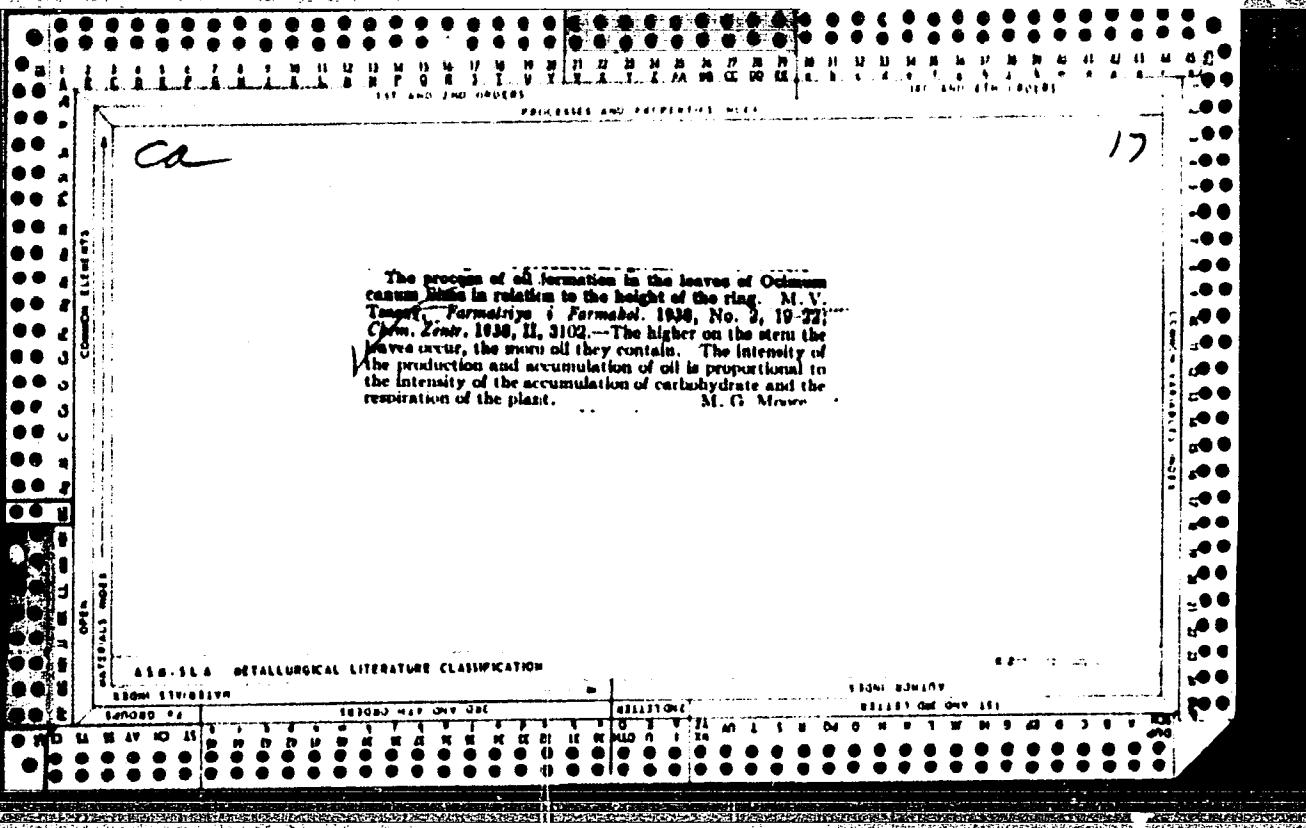
ASOCIATIONS: Stalinskiy sovnarkhoz (Staline Sovnarkhoz)(Tsarev);  
Dnepropetrovskiy goinyy institut (Dnepropetrovsk  
Minin Institute); (Shpakher, Korchagin, Pluzhnik);  
Mospirskaya briketcaya fabrika (Mospiro Briquetting Works) (Zel'din,  
Bul'shtcyn)

Card 3/5

TSAREV, M. N.; ZHERDEV, A. P.

Some problems in the future development of the manufacture of agricultural chemicals with coal chemicals as the raw material. Koks i khim. no.2: 40-42 '63. (MIRA 16:2)

1. Donetskiy sovet narodnogo khozyaystva.  
(Donetsk Province—Agricultural chemicals) (Coke industry—By-products)



CA

17

A method for determination of lobeline in *Lobelia inflata*. M. V. Tsar'ev. *Zhurn. Farmatsiya* 1939, No. 6, 15-18; *Khim. Referat. Zashch.* 1939, No. 11, 60.---Add 40.0 cc. of ether to 20 g. of the finely powdered plant, shake, add 10 cc. of 5% soda soln., shake for 15-20 min. and let stand for 1-2 days. Take two 100-cc. samples of the etheral ext., which contains the alkaloids of the *Lobelia*, ext. each several times with 1% HCl, decant the HCl exts. into a wsg. funnel, make alk. with soda and ext. the alkaloids 6-8 times with ether, controlling the completeness of the extn. with silicotungstic acid. Dry the collected etheral extn. over  $\text{Na}_2\text{O}$ , filter, distill off the ether (remove the last 10-15 cc. by blowing with air), add to the remaining alkaloids 10 cc. of 0.1 N HCl and back-titrate the excess with 0.1 N NaOH in the presence of methyl red. The total content of the alkaloids is detd. from the amt. of HCl combined with them. One cc. of 0.1 N HCl corresponds to 0.0337 g. of the alkaloids (calcd. to the wt. of lobeline). After titration ext. the lobeline-HCl with  $\text{CHCl}_3$  from the sg. soln., filter through a dry filter and titrate from a microburet with 0.02 N NaOH soln. in the presence of phenolphthalein. One cc. of 0.02 N NaOH corresponds to 0.00074 g. of lobeline.

W. R. HORN

430-350 RETAIL/CREW LITERATURE CLASSIFICATION

— 10 —

**APPROVED FOR RELEASE: 03/14/2001**

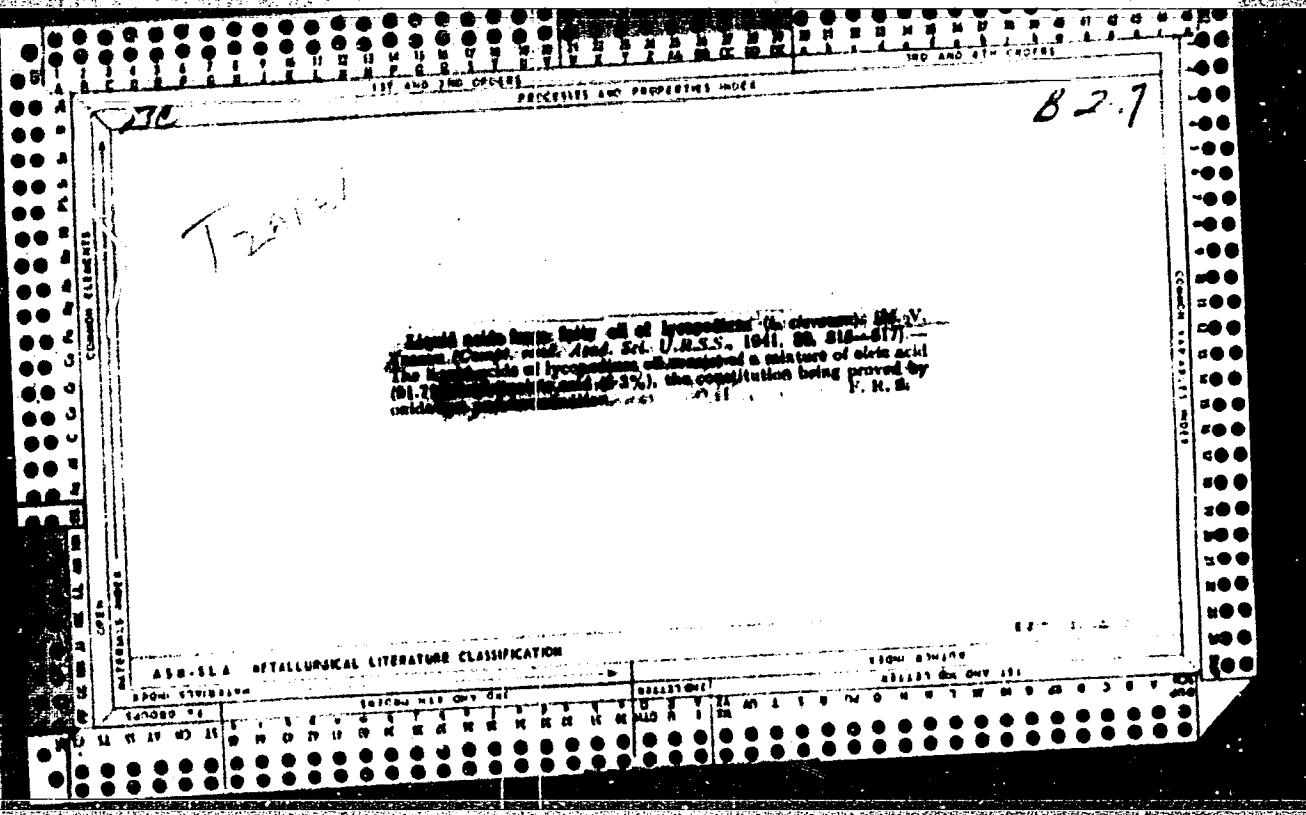
CIA-RDP86-00513R001756920006-5"

C4

7

General method for determining camphor. M. V. Tsarev. *Vesn. Akad. Nauk SSSR* 1941, No. 1, 22-5. — Oximation of camphor with  $\text{NH}_3\text{OH}\cdot\text{HCl}$  in sq.  $\text{ROH}$  can be followed by titrating against bromophenol blue. The fact that the end point is sharp permits accurate detm. of the extent of oximation at any moment. *d*-Camphor reacts somewhat faster than *l*-camphor under the prescribed conditions, reaching 100% oximation in 100 min. (*l*-camphor, 99.5% in 125 min.). The method is particularly useful for detg. camphor in the presence of esters, e.g., fatty oils.  
Julian F. Smith

## ASBULLA METALLURGICAL LITERATURE CLASSIFICATION



CA

17

**Chemical characteristics of *Podophyllum peltatum*.**  
 M. V. Tsvetov. Farmatsev. 6, No. 6, 16-22 (1943).—The podophyllin content of *Podophyllum peltatum* is higher than that of *P. emodi*, though the literature says otherwise. Both in yield and potency of podophyllin and podophyllotoxin the *P. peltatum* raised around Moscow is fully equal to American podophyllin. The roots are richer in podophyllin than the rhizomes. Podophyllotoxin and picropodophyllin are isomers; podophylloquercetin is identical with quercetin; podophylloreticin is a dihydroxy compd.  $C_{16}H_{14}O_6$ . Extrn. of roots and rhizomes with 98% EtOH, followed by pptn. with dil. HCl, yielded 1/4 to 1/2 of the total podophyllin ext. in the first extrn., about 1/2 in the next and less than 10% in the 3rd. An improved podophyllin assay method uses a special extractor to ext. 5 g. of sample with 25 ml. 98% EtOH, 2 to 2.5 hrs. on a boiling-water bath. The H<sub>2</sub>O<sub>2</sub> is evapd. and the residue is washed with 25 ml. 0.3% HCl. After 10-15 min. the amorphous residue is transferred to a glass filter, washed with 10-15 ml. 0.15% HCl, dried at 80° and weighed. This method is faster than the U. S. Pharmacopela method.

J. P. Smith

## ASB-1A METALLURGICAL LITERATURE CLASSIFICATION

S-77-1000-1000

ECON. STABILITY

TECHN. MTH. ONLY ONE

TECHN. BOUNDARY

TECHN. CTR.

TECHN. MTH. ONLY ONE

TECHN. ONLY ONE

CA

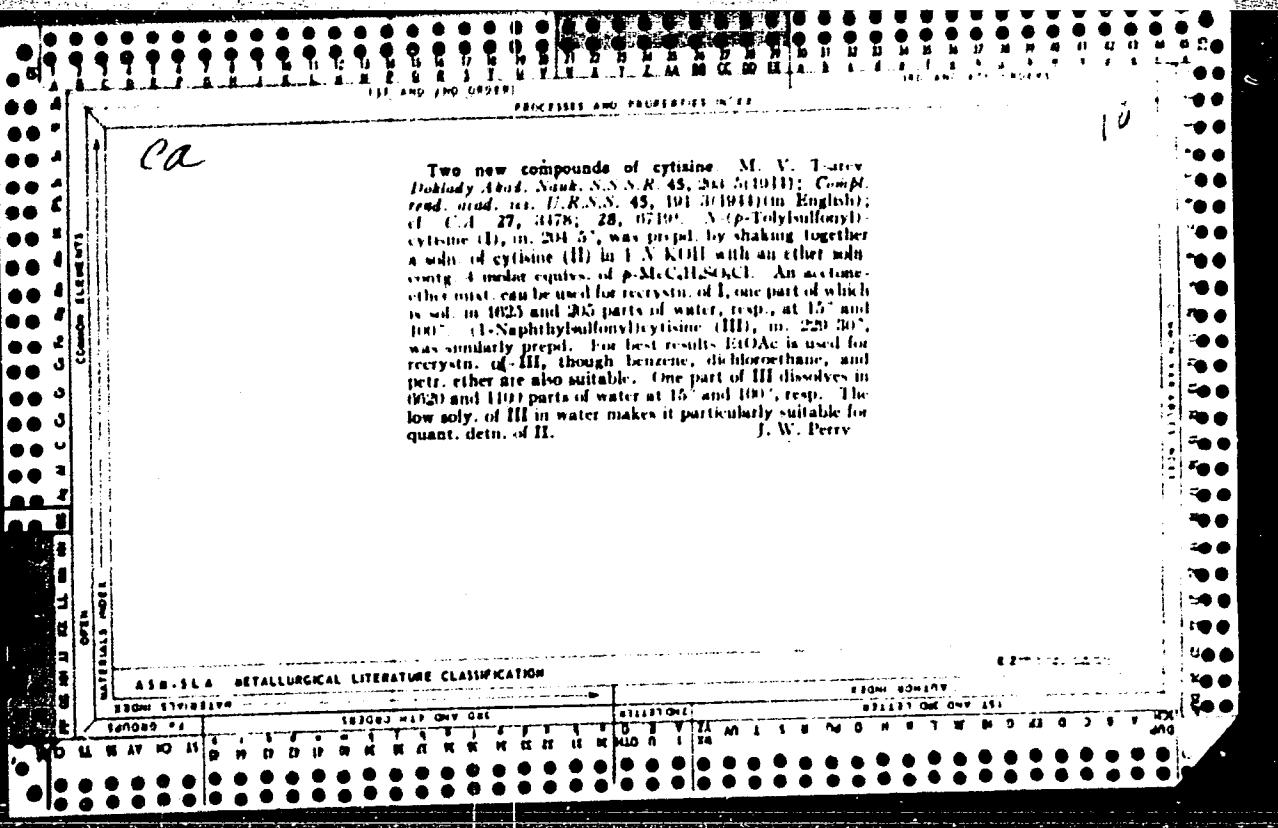
17

Seeds of *Thermopsis macrocarpa* R. Br. as a source of cytisine. M. V. Hansen. *Compt. rend. acad. Sci. U. R. S. S.* 43, 123-6 (1944) (in English).—Seeds of *Thermopsis macrocarpa* contained 8.18% total alkaloids (*TA*) and 0.61% cytisine (*I*). *TA* was extd. by macerating the ground seeds with 13%  $\text{NH}_4\text{OH}$ , repeatedly extg. with dichloroethane, removing *TA* from the ext. with 10% aq.  $\text{H}_2\text{O}_2$ . Heating and purifying the *TA* by successively adding  $\text{NH}_4\text{OH}$  to ab. reaction, extg. the *TA* with  $\text{CHCl}_3$ , drying the  $\text{CHCl}_3$  soln., and evap. to dryness. On extg. the *TA* with acetone, an invol. fraction (approx. 1/4 of the *TA*), m. 200-270° was obtained; this is thought to be a new alkaloid. The acetone soln. was evapd. to dryness, extd. with ether and the residue recrystd. from acetone to obtain pure *I*, m. 183-4°. Aridin. *I* could be isolated from accompanying alkaloids by dissolving them in ab. and adding concd.  $\text{HNO}_3$  dropwise. Isolation of *I* as its *p*-toluenesulfonaryl deriv., m. 305°, is described. I. W. Petty

I. W. FLEM

**APPROVED FOR RELEASE: 03/14/2001**

CIA-RDP86-00513R001756920006-5"



TSAREV, M. V.  
USSR/Chemistry

Card 1/1

Authors : Belikov, A. S.; Ban'kovskiy, A. I.; and Tsarev, M. V.

Title : Alkaloids from Gleditschia Triaacanthos L.

Periodical : Zhur. Ob. Khim. 24, Ed. 5, 919 - 922, May 1954

Abstract : A new alkaloid (triacanthine) of the composition  $C_8H_{10}N_4$  was obtained from Gleditschia triacanthos L leaves. Other derivatives of triacanthine are : hydrochloride, hydrobromide, nitrate, picrate, picronlonate, sulphate and iodomethylate. The method of separating and purification of the alkaloid is described. Seven references.

Institution : All-Union Scientific-Research Institute of Medicinal and Aromatic Herbs

Submitted : November 22, 1953

TSAREV, M.Ya., inzh.

Regulate the time of delivery of planning papers and improve their quality. Stroi. truboprov. 7 no.11:8-9 N '62. (MIRA 15:12)

1. Trest po stroitel'stvu gazoprovodov Glavnfteprovodstroya Ministerstva stroitel'stva predpriya neftyanoy promyshlennosti SSSR. (Gas, Natural—Pipelines)

TSAREV, N.

Explorers of the future. Zhil.-kom.khoz. 10 no.9:16-18 '60.  
(MIRA 13:9)

1. Predsedatel' obkoma profsoyuza rabochikh mestnoy promyshlennosti  
i kommunal'nogo khozyaystva, g. Rostov-na-Donu.  
(Rostov-on-Don--Municipal services)

TSAKOV, N. I.

"Lymph Vessels of the Conjunctiva of the Eyelids." Cand Med Sci, Leningrad Sanitary-Hygiene Medical Inst, Leningrad, 1954. (RZhBiol, No 8, Apr 55)

SO: Sum. No. 704, 2 Nov 55 - Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (16).

3481 TSAREV N. I.

Konstruirovaniye zhenskoy verkhney odezhdy (Dlya massovogo poshiva)  
2-ye izd M. Gizlegprom, 1954 216 s. s ill. 1 l. chert. 23 sm 100,000  
ekz (1-y savod 50tys) 8 r. V. Per. (54-57321) 697.12.022

USSR/Human and Animal Morphology (Normal and Pathological) Lymph S-4  
System

Abs Jour : Ref Zhur - Biol., No 12, 1958, No 55121

Author : Tsarev, N.I.

Inst : Chkrichev Institute of Medicine.

Title : Direction of the Lymphatic Flow from the Human Palpebral Conjunctiva.

Orig Pub : Tr. Chkalovskogo med. in-ta, 1956, vyp. 5, 461-465

Abstract : The lymphatic flow from the middle half of the upper eyelid conjunctiva is directed into the submaxillary lymphatic nodules, while from the lateral half it is directed into the pretibial lymphatic nodules. Mostly, the lymph gland flows from the middle part of the palpebral conjunctiva through the vessels of the medial canthus. The lymphatic flow from the lower eyelid conjunctiva is mostly also directed through the vessels of the medial canthus of the palpebral fissure. Submaxillary lymphatic nodules predominate among the regional lymphatic nodules. Pretibial and anterior cervical nodules are found less frequently.

Card : 1/1

TSAREV, N.I.; RAZBASH, I.Ya., dotsent, nauchnyy redaktor; SINICHENKO,  
B.M., redaktor; MEDVEDEV, L.Ya., tekhnicheskiy redaktor

[Making women's coats and suits] Konstruirovaniye zhenskoi verkimei  
oderzhdy; dlia massovogo poshiva. 2-e izd. Moskva, Gos. nauchno-  
tekhn. izd-vo Ministerstva promyshlennyykh tovarov shirokogo potre-  
bleniya SSSR, 1954. 213 p.  
(Tailoring (Women's))

(MIRA 8:4)

SINYAKOV, Aleksandr Borisovich; TSAREV, Nikolay Ivanovich;  
KARASEV, V.K., red.

[Technology of the processing of men's suits made from  
fabrics containing over 50% of lavsan fibers; practices of  
the Leningrad House of Fashion Design] Tekhnologiya obra-  
botki muzhskikh kostiumov iz tkanei, soderzhashchikh svyshi  
50% volokna lavsan; opyt leningradskogo Doma modelei. Le-  
ningrad, 1964. 26 p. (MIRA 18:2)

ROMANOVA, Anna Seliverstovna; TSAREV, Nikolay Ivanovich; ANTIPOVA,  
A.I., red.

[Pattern construction for men's shirts according to girth  
experience of the "Krasnaya rabotnitsa" Clothing Factory in  
Leningrad] Konstruirovaniye muzhskikh srochek po polnotam;  
opyt Leningradskoi shveinoi fabriki "Krasnaya rabotnitsa."  
Leningrad, 1964.. 30 p. (MIRA 17:9)

"APPROVED FOR RELEASE: 03/14/2001

CIA-RDP86-00513R001756920006-5

TEAREV, N.I. (Leningrad)

Experience in the manufacture of men's shirts. Shvein. prom. no.  
3:32-34 My-Je '64. (MIRA 17:9)

APPROVED FOR RELEASE: 03/14/2001

CIA-RDP86-00513R001756920006-5"

"APPROVED FOR RELEASE: 03/14/2001

CIA-RDP86-00513R001756920006-5

ALEKSANDROV, A. P.; KHLOIKIN, N. S.; POLOGIKH, B. G.; TSAREV, N. M.; SLEDZIYUK, A. K.

"Operation of atomic plant on the icebreaker Lenin."

report submitted for 3rd Intl Conf, Peaceful Uses of Atomic Energy, Geneva,  
31 Aug-9 Sep 64.

APPROVED FOR RELEASE: 03/14/2001

CIA-RDP86-00513R001756920006-5"

2c

L 20050-65 EPP(c)/EPP(n)-2/ZMT(m)/EPA(bb)-2/T Pr-4/Pu-4 AEDC(a)/AEDC(b)/  
AEDC(d)/SSD/SSD(n)/APWL/ASD(p)-3/ESD(t)/ZSD(s1) DM  
ACCESSION NR: AP4049535 8/0089/64/017/005/0349/0359

AUTHORS: Afrikantov, I. I.; Mordvinov, N. M.; Novikov, P. D.;  
Pologikh, S. G.; Sledzyuk, A. K.; Khlopin, N. S.; Tsarev, N. M.

TITLE: Operating experience with the atomic installation of the  
"Lenin" ice breaker [9]

SOURCE: Atomnaya energiya, v. 17, no. 5, 1964, 349-359

TOPIC TAGS: nuclear power system, reactor shutdown, reactor start  
up, nuclear propulsion

ABSTRACT: The icebreaker covered some 60,000 miles since its commissioning, of which 40,000 miles were in ice. The reactors operate at present with their second fuel charge. Each reactor delivered from its first charge 430--490 thousand MW-hr of thermal energy in more than 11,000 hours. The average yield was 13,000 MW-day/ton of uranium, with the maximum reaching 30,000. The reactors operated

Card 1/2

L 20052-65  
ACCESSION NR: AR4039377

of compressors in the experimental engine 2DN-53 (65 hp at 1600 rpm). The design incorporates a RUTA type compressor and an Ebeshpokher gas turbine compressor. A nomogram was plotted for combined operation of the compressors at typical speeds, i.e. 1600 and 1000 rpm. Efficiency cumulates in parallel coupled compressors, while for tandem coupling it depends on the point at which the total resistance line intersects with the compressor curve. It is shown that the gas turbine compressor exerts significant resistance to the flow of air at low load levels and begins to operate efficiently only above engine loads which insure compressor speeds of 10,000 rpm. Up to 60% of the pressure generated by a gas turbine compressor is lost at high load levels to overcome the resistance offered by a drive actuated compressor. Air should be channeled to bypass the drive actuated compressor in the latter case. One illustration. P. Shelest.

SUB CODE: PR

ENCL: 00

Card 2/2

"APPROVED FOR RELEASE: 03/14/2001

CIA-RDP86-00513R001756920006-5

SEVAST'YANOV, N.D.; TSAREV, N.P.

Introducing a boring tool with a vibration damping chamfer. Stan.  
i instr. 26 no.8:32 Ag'55. (MIRA 8:12)  
(Cutting tools)

APPROVED FOR RELEASE: 03/14/2001

CIA-RDP86-00513R001756920006-5"

KALININ, A.P., kand.med.nauk; TSAREV, N.P.

Complications after vaccination. Sov.med. 25 no.1:127-130 Ja '61.  
(MIRA 14:3)

1. Iz kafedry khirurgii i neotlozhnoy khirurgii (zav. - prof. P.V. Kravchenko) Kazanskogo gosudarstvennogo instituta usovershenstvovaniya vrachey imeni V.I.Lenina i Kanashskoy lineynoy bol'nitsy (nachal'nik G.V.Kalechits).

(VACCINATION)

TSAREV, N. V.

Dissertation: -- "On the Propagation of Plastic Waves in a Granular Medium."  
Cand Phys-Math Sci, Geophysics Inst, Acad Sci USSR, 23 Jun 54. (Vechernyeya Moskva,  
14 Jun 54)

SO: Sum 318, 23 Dec. 1954.

SOV/85-58-10-12/34

AUTHOR: Tsarev, P., Chief of Administration, USSR DOSAAF Central Committee

TITLE: A High Degree of Discipline and Organization (Za vysokuyu distsiplinu i organizovannost')

PERIODICAL: Kryl'ya rodiny, 1958, Nr 10, p 9 (USSR)

ABSTRACT: The author stresses the importance of greater discipline and better organization in DOSAAF units. He praises several aeroclubs for the high standards they maintain, among them the Krasnoyarskiy aeroklub (Krasnoyarsk aeroclub), (chief S. Yankovskiy), and the majority of Ukrainian aeroclubs, but finds fault with many other clubs, including those in Yaroslavl', Ryazan', Rostov, Alma-Ata, Gor'kiy, Stalingrad, and Vladimir, where lack of discipline and carelessness on the part of pilots and instructors has led to accidents. Personalities mentioned include flying instructor Borovkov (Yaroslavl'), flying instructor Sorokin (Ryazan'), flying instructors A. Chuguyev (Rostov) and A. Sainin (Alma-Ata), and M. Tsurkan, chief of aviation unit (Gor'kiy), A. Zavin, chief of aeroclub (Vladimir), flying instructor Krest'yaninov and senior engineer V. Latvis (Vladimir), and unit commander Korolev and flying instructor Men'shov (Gor'kiy).

ASSOCIATION: Upravleniye TsK DOSAAF SSSR (USSR DOSAAF Central Committee Administration).

Card 1/1

"APPROVED FOR RELEASE: 03/14/2001

CIA-RDP86-00513R001756920006-5

TSAREV, P.

Ten gold medals. Kryl.rod. 14 no.9:20-21 S '63. (MIRA 16:9)  
(Parachuting)

APPROVED FOR RELEASE: 03/14/2001

CIA-RDP86-00513R001756920006-5"

"APPROVED FOR RELEASE: 03/14/2001

CIA-RDP86-00513R001756920006-5

TSAREV, P.

For the "Adriatic Cup." Kryl. rod. 16 no.10:22-23 0 '65.  
(MIRA 18:12)

APPROVED FOR RELEASE: 03/14/2001

CIA-RDP86-00513R001756920006-5"

L 7788-66 EWT(d)/FSS-2/EWT(1)/EWA(h)

ACC NR: AP5022963

SOURCE CODE: UR/0256/65/000/006/0067/0070

AUTHOR: Tsarev, P. K. (Engineer, Colonel); Savis'ko, P. A. (Senior engineer, Lieutenant)

ORG: None

TITLE: Aerial situation representation panel

SOURCE: Vestnik protivovozdushnoy oborony, no. 6, 1965, 67-70

TOPIC TAGS: parametron, air defense system, control panel, computer application

ABSTRACT: Air defense units can accomplish successfully their missions only if there is always a clear picture of the instantaneous aerial situation. There exist numerous control schemes using luminescent panels. The authors report on a new control device built with parametrons which has very high reliability, long lifetime, low required power, and an insignificant sensitivity to external conditions and perturbations. Furthermore, the panel is inexpensive to make. The article (1) describes the design and operation of parametrons; (2) describes the computer device which accepts coded messages from ST-35 telegraph devices; (3) discusses the operation of the receiving registers, each of which can choose among 784 panel locations and flash at each location one of the 0 to 9 digits; the code decipherer converts the incoming code into a combination of electroluminophore sectors; and (4) outlines the design and composition of the cell control circuits (made of address parametrons, buffer

Card 1/2

L 7788-66

ACC NR: AP5022963

parametrons, current amplifiers, and terminal memory parametrons) and of a simple displaced pulse generator. Orig. art. has: 5 figures and 1 table.

SUB CODE: DC, EC, MS / SUBM DATE: none

nm

Card 2/2

"APPROVED FOR RELEASE: 03/14/2001

CIA-RDP86-00513R001756920006-5

TSAREV, P.P.

Device for clamping branch pipes and couplings to pipes at a  
90° angle. Rats.i izobr.predl. v stroi. no.100:18 '54.  
(Pipe--Welding) (MIRA 8:10)

APPROVED FOR RELEASE: 03/14/2001

CIA-RDP86-00513R001756920006-5"

TSAREV, P. V.: Master Geolog-Mineralog Sci (diss) -- "Generalization of experience in engineering-geological investigation to provide principles for designing and building a series of hydroelectric power plants in areas of hard rock". Moscow, 1959. 15 pp (Min Higher Educ USSR, Moscow Geological Prospecting Inst im S. Ordzhonikidze), 110 copies (KL, No 15,,1959, 11<sup>4</sup>)

TSAREV, P.V.

Some engineering and geological research problems in the  
building of hydroelectric plants in rock ground areas. Izv.  
vys. ucheb. zav.; geol. i razv. 2 no.12:128-133 '59. (MIRA 14:6)

1. Moskovskiy gosudarstvennyy institut imeni S. Ordzhonikidze.  
(Hydroelectric power stations) (Engineering geology)

BALAYEV, Lev Grigor'yevich; TSAREV, Petr Vasil'yevich; POPOV, I.V.,  
doktor geol.-miner. nauk, prof., otd. red.; ZOLOTOV, P.F.,  
red.izd-va

[Loess in central and eastern Ciscaucasia] Lessovye porody  
TSentral'nogo i Vostochnogo Predkavkaz'ia. Moskva, Izd-vo  
"Nauka," 1964. 247 p. (MIRA 17:4)

TSAREV, S.A.

ANIKHANOV, P.A.; MINERVIN, G.V.; TSAREV, S.A.

Automatic control in die stamping. [Izd.] LONITOMASH vol.40:194-  
205 '56. (MLRA 10:4)  
(Sheet metal work) (Automatic control)

TSAREV, S. A.

SEVCENKO, V.B. [Shevchenko, V.B.]; ZOLOTUCHA, S.I. [Zolotukha, S.I.];  
KASCEJEV, N.F. [Kashcheyev, N.F.]; CAREV, S.A. [TSarev, S.A.];  
MICHAJLOV, A.A. [Mikhaylov, V.A.]; TOROPCENOV, G.A.  
[Toropchenova, G.A.]; MANCIK, M. [translator]

Complex utilization of uranium ores. Jaderna energie 4 no.11:  
338-341 N '58.

TSAREV, S.A.

21(1) PLATE I BOOK EXPLORATION SOV/2714  
International Conference on the Peaceful Uses of Atomic Energy - 2nd.  
Geneva, 1958.

Society for和平科学者, 1958年  
(Reports of Soviet Scientists: Nuclear Fuel and Reactor Materials) Moscow,  
Academy of Sciences, Soviet Scientists: Nuclear Fuel and Reactor Materials Series:  
270 pp. (Series: 250: Treaty, Vol. 3, 6,000 copies  
printed).

Ed. (Title page): A.U. Kochnev, Academician, A.P. Vinogradov, Academician,  
V.A. Tsvetkov, Corresponding Member, USSR Academy of Sciences, and  
A.S. Zaitsev, Doctor of Technical Sciences; Ed. (Index book): V.V. Tsvetkov,  
Petrovsky and G.M. Peshlitskaya; Tech. Ed.: E.I. Basel'.

INTRODUCTORY: This volume is intended for scientists, engineers, physicians, and  
students working in the production and peaceful application of atomic  
energy, for professionals and students of schools of atomic  
energy, and for all concerned with the subject as taught; and for people  
interested in atomic science and technology.

CONTENTS: This is Volume 3 of a 2-volume set of reports on atomic energy,  
presented by Soviet scientists at the Second International Conference on the  
Peaceful Uses of Atomic Energy, held in Geneva from September 1 to 13, 1958.  
Volume 3 consists of two parts. The first part, edited by A.I. Zubov, is  
devoted to geology, properties, construction, and processing of nuclear  
fuels material. The second part, edited by G.I. Zverev, includes 27 reports  
on metallurgy, metallurgy, processing, handling of nuclear fuels and  
reactor materials, and neutron irradiation effects on metals. The titles of the  
individual papers in most cases correspond with those in the  
official English language edition on the Conference proceedings. See  
SOV/2681 for the titles of the other volumes of the set.

Ed. (Title page): A.U. Kochnev, M.I. Blinov, A.M. Shishov, and V.M. Latyshev.  
Publication of Proceedings From Scientific Articles and Cross  
(Report No. 2682) 259

Report, M.I., and I.P. Leksin. Flotability of Soils (Report No. 2685) 249

Vladimir, M.I., and A.S. Vinogradov. Extraction of  
Uranium-235 from Natural Water (Report No. 2681) 255

Shchegolev, V.D., S. S. Slobodchikov, R.P. Kostichkin, D.G. Tsvetkov, I.A.  
Zaitsev, and G.M. Peshlitskaya. Complex Utilisation of Uranium Oxide  
(Report No. 2683) 265

Dzhin, O.Ya., and I.A. Uspenskii. Investigations on Alkaline Methods  
for Separation and Electro Processing (Report No. 2154) 274

cont'd 5/12

UW 52

TSAREV, S. G.

USSR/Medicine - New Synthetic Drug

"Synthetic Arekolin," S. G. Tsarev, Moscow Vet Acad

Veterinariya, No 11, pp 57-59 1962

Describes a new synthetic drug Arekolin produced by Malkov. Its exptl use in doses of 0.5 ml of a 1% soln administered to sheep weighing 25-30 kg caused an increase in the action of salivary glands, in the gastric and intestinal tonus, and in the frequency of the peristalsis. It is recommended for the same use and in the same dosage as the vegetable Arekolin.

263T67

TSAREV, S. G.

Antihelminthic action of synthetic acetoxime  
Tsvetey (Moscow Vn. Acad.). *Vestn. Akad. Nauk SSSR*, No. 30-1 (1953).—Synthetic acetoxime, based on cephaelosporin, is recommended as a fully cured drug for the treatment of alkaloid. In ducks the drug has a therapeutic dose of 1 mg./kg., with therapeutic dose of

"APPROVED FOR RELEASE: 03/14/2001

CIA-RDP86-00513R001756920006-5

APPROVED FOR RELEASE: 03/14/2001

CIA-RDP86-00513R001756920006-5"

USSR/Pharmacology and Toxicology. Cholinergics

V-5

Abs Jour : Ref Zhur - Biol., No 10, 1958, No 47195

Author : Tsarev S.G.

Inst : -

Title : Pharmacological Properties of Synthetic Arecoline

Orig Pub : Farmakol. i toksikologiya, 1956 (1957), prilozh. Sb. ref.,  
43-44

Abstract : A comparative study of synthetic arecoline and vegetable preparations in experiments on mice, rabbits, ducks, geese, dogs, horses, cows, and sheep, established that the synthetic preparation, as to its pharmacological properties (characteristic strength and duration of action, as well as by its anticholinergic effect on birds and dogs), does not differ in the least from vegetative arecoline....

Myazdrikova

Card : 1/1

20

TSAREV, S.G., kand. veterin. nauk; NIKOLAYEVA, V.V.

Searching for a laboratory model and the prophylaxis of  
atrophic rhinitis in swine. Veterinariia 39 no.8:73-74  
(MIRA 17:12)  
Ag '62.

1. Kazanskiy veterinarnyy institut (for TSarev). 2. Dal'ne-  
vostochnyy nauchno-issledovatel'skiy veterinarnyy institut  
(for Nikolayeva).

CHERVYAKOV, D.K., prof.; TSAREV, S.G., dotsent; KREFYSHEV, Ye.M., dotsent;  
LOKTIONOV, V.N., mladshiy nauchnyy sotrudnik

Effect of chloracetophos, thiophos, and chlrophos on the development  
of the larvae of the warble fly in cattle. Uch. zap. KVI 89:117-130  
'62.

Use of phosphorus organic preparations for the treatment of tri-  
chophytosis in animals. Ibid.:131-139 (MIRA 12:8)

1. Laboratoriya khimioterapii (zav. - prof. D.K.Chervyakov)  
Kazanskogo veterinarnogo instituta.

Tbilisi, Georgia, 2000

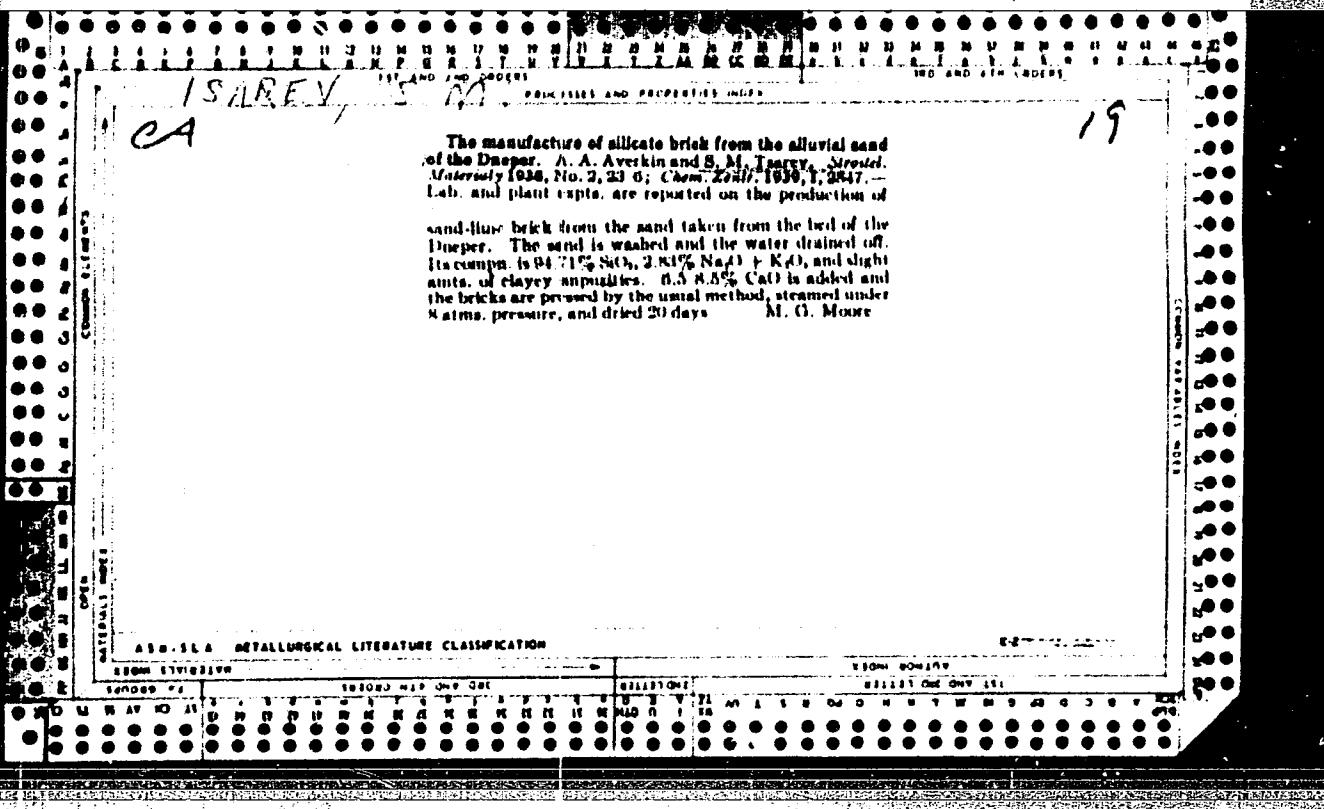
Studying the larvicultural action of *Phytomyza organica* on *Scirpus* 15  
pendules Tbilisi Service phonogram 1. Nat. zap. Evi 89; 41-143 102.  
(NTRA date)  
I. Laboratoriya khimioterapii (zav. - prof. D.K. Chervyakov)  
Kazanegi, vaterinarnye institut.

TSAREV, Sergey Georgiyevich; FEDOTOV, V.G., red.; SAYTANIDI, L.D.,  
tekhn. red.

[Use of drugs in veterinary medicine] Primenenie lekarstven-  
nykh sredstv v veterinarii. Moskva, Izd-vo MSKh RSFSR, 1963.  
(MIRA 16:7)  
233 p.  
(Veterinary materia medica and pharmacy)

TSAREV, Sergey Georgiyevich; FEFERMAN, A.Ye., red.

[Medicinal plants in veterinary medicine] Lekarstvennye  
rastenija v veterinarii. Moskva, Rossel'khozizdat, 1964.  
171 p. (MIRA 18:3)



"APPROVED FOR RELEASE: 03/14/2001

CIA-RDP86-00513R001756920006-5

TSAREV, S. M.

TSAREV, S. M. "The preparation of the raw mass for the production of silicate bricks",  
Most. stroit. materialy, 1948, Issue 7, p. 7-13.

SO: U-3042, 11 March '48, (Lettcpis 'Zhurnal 'nykh Statey, No. 7 1949).

APPROVED FOR RELEASE: 03/14/2001

CIA-RDP86-00513R001756920006-5"

TRARCHY, S.G.; TIKHONOVICH, N.I., red.

[Accounting practice on a collective farm] Spyt ucheta v  
kolkhoze. Moscow, Izd-vo Kolos, 1964. 91 p.  
(Mil. 17:8)

TSAREV, S.V., inzh.

Mobile section buildings. Mont. i spets. rab. v stroi. 25 no.3:21-22  
(MIRA 16:2)  
M 1:63.

1. Kuybyshevskoye montazhnoye upravleniye tresta Neftekhimmontazh.  
(Buildings, Portable)

TSAREV, V., inzh. (Astrakhan'); NIKOL'SKIY, V.; POPOV, Yu., starshiy master; ARKHIPOV, I., malyar (g. Cheboksary); PINDYURIN, F. (g. Biysk); PLAVIN, B.M., mekhanik; LOGINOV, B.

Advertising board. Izobr.i rats. no.2:32-33 F '62. (MLR 15:3)

1. Rostovskiy-na-Donu kotel'no-mekhanicheskiy zavod (for Popov).  
(Technological innovations)

NELIPA, N.F.; TSAREV, V.A.

Inverse dispersion relations for the photoproduction of  $\pi$ -mesons  
on nucleons. Zhur. eksp. i teor. fiz. 38 no.1:259-260 Jan '60.  
(MIRA 14:9)

1. Fizicheskiy institut im. P.N.Lebedeva AN SSSR.  
(Photonuclear reactions) (Mesons) (Nucleons)

NELIPA, N.F.; TSAREV, V.A.

Double dispersion relations and the photoproduction of  $\pi$ -mesons.  
Zhur. eksp. i teor. fiz. 40 no.6:1710-1712 Je '61.

(MIRA 14:8)

1. Fizicheskiy institut im. P.N. Lebedeva AN SSSR.  
(Photonuclear reactions)  
(Mesons)

"APPROVED FOR RELEASE: 03/14/2001

CIA-RDP86-00513R001756920006-5

DELIPA, N. F.; MAROV, V. A.

"The Dispersion Relations for K-Meson Photoproduction on Nucleon and  
K<sup>-</sup>-Meson on Hyperon"

report presented at the Intl. Conference on High Energy Physics, Geneva,  
4-11 July 1962

APPROVED FOR RELEASE: 03/14/2001

CIA-RDP86-00513R001756920006-5"

"APPROVED FOR RELEASE: 03/14/2001

CIA-RDP86-00513R001756920006-5

ZAVARITSKIY, N. V. and TSAREV, V. A.

"Experimental Test of the Spin-Wave Theory to Ferromagnetic Metals."

report presented at the 8th Intl. Congress on Low-Temperature Physics, 17-21 Sept 62.  
London, England

Inst. for Research on Problems of Physics. Acad. Sci. USSR

APPROVED FOR RELEASE: 03/14/2001

CIA-RDP86-00513R001756920006-5"

43363  
S/056/62/043/005/011/058  
B102/B104

2/1960

AUTHORS:

Anvarlyk, N. V., Tsvetov, V. A.

TITLE:

Variation of saturation magnetization of ferrromagnetism at helium temperatures

PERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 43,  
no. 5(11), 1962, 1638-1643

TEXT: The temperature variation of the spontaneous magnetic moment,  $dM_s/dT$ , was measured between 1.4 and 5°K on iron and nickel cylinders, 3 cm long and of 0.18 cm diameter. The impurity content of Ni was  $\leq 0.1\%$ , that of Fe  $\leq 0.03\%$ ; both samples were annealed in vacuo at 1000°C for 3 - 4 hrs. Since the variations of  $M_s$  are very small in this temperature region (0.01%),  $dM_s/dT$  was determined from the oscillations of  $M_s$  induced by temperature oscillations. The amplitudes of the latter were measured with three thermometers; the frequency was 9.2 cps and the wavelength 16 cm for iron and 3.6 cm for nickel. At 4.2°K the magnetic

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S/056/62/043/005/011/058

B102/B104

Variation of saturation magnetization of ...

susceptibility  $\chi = QH^{-3}$  for  $1 \leq H \leq 11$  koe and  $Q \approx 10^8$  for Ni. From  $M = M_s(1 - gH^{-2})$ ,  $g \approx Q/2M_o \approx 10^5$ ,  $M_o \approx 510$  CGSM for Ni,  $dM/dT = (dM_s/dT)(1 - g/H^2) - (M_s/H^2)(dg/dT)$  follows. The corresponding curves are shown in Figs 3 and 4. How far Bloch's law is satisfied at these temperatures was examined from the temperature dependence of  $dM/M_o dT$ , which, according to Bloch, should read  $dM/M_o dT = \frac{3}{2}CT^{1/2}$ . For nickel, agreement was found between 3-5°K, but for iron this was the case only at a field of 2 koe. At lower temperatures or stronger fields the law is violated and  $dM/M_o dT$  decreases more rapidly than  $\sim T^{1/2}$ . The results are in accordance with the spin wave theory, wherefrom

$$\left| \frac{dM_s}{M_o dT} \right| = \frac{3}{2} CT^{1/2} \left[ 1 - \frac{4}{3} \frac{\Gamma(1/2)}{\zeta(3/2)} \left( \frac{\mu H}{kT} \right)^{3/2} - \frac{1}{3} \frac{\zeta(1/2)}{\zeta(3/2)} \frac{\mu H}{kT} \dots \right] \quad (10a)$$

Card 2/4

Variation of saturation magnetization of ..B102/B104  
result.  $K$  is the wave vector of the spin wave,  $A$  is a quantity proportional to the exchange integral and  $\zeta(x)$  is Riemann's zeta function; for iron  $C = 3.7 \cdot 10^{-6}$  and  $\mu = 1.1 \cdot 10^{-20} \text{ erg/G} \approx 1.2 \mu_0$ , where  $\mu_0$  is Bohr's magneton, for nickel  $C = 10^{-5}$  and  $\mu = 0.22 \cdot 10^{-20} \text{ erg/G} = 0.25 \mu_0$ . Hence the temperature dependence of  $M_s$  agrees well with the spin wave theory.

There are 6 figures and 1 table.

ASSOCIATION: Institut fizicheskikh problem Akademii nauk SSSR  
(Institute of physical problems of the Academy of Sciences USSR)

SUBMITTED: June 13, 1962

Fig. 3.  $dM/dT = f(H)$  for Ni; o at  $2^\circ\text{K}$  and at  $4.2^\circ\text{K}$ .

Fig. 4.  $dM/dT = f(H)$  for Fe; o at  $2^\circ\text{K}$  and at  $4.2^\circ\text{K}$ .

Card 3/4

Variation of saturation magnetization of...  
S/056/62/043/005/011/058  
B102/B104

Fig. 3

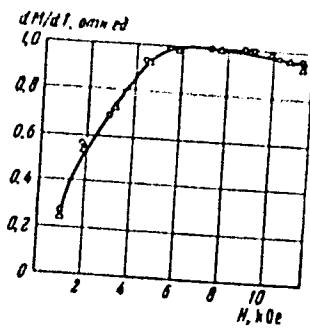
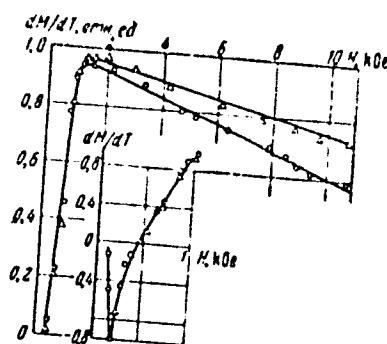


Fig. 4



Card 4/4

5/0048/64/028/003/0533/0536

ACCESSION NR: AP4023402

AUTHOR: Zavaritskiy, N.V.; Tsarev, V.A.

TITLE: Saturation magnetization of ferromagnetic materials at liquid helium temperatures [Report, Symposium on Ferromagnetism and Ferroelectricity held in Lenin-grad 30 May to 5 Jun 1962]

SOURCE: AN SSSR. Izvestiya. Seriya fizicheskaya, v.28, no.3, 1964, 533-536

TOPIC TAGS: saturation magnetization, low temperature saturation magnetization, iron, nickel, iron saturation magnetization, nickel saturation magnetization, Bloch's law, spin waves

ABSTRACT: The magnetization of nickel single crystals and polycrystalline nickel and iron samples was measured at temperatures from 1.4 to 50K and magnetizing fields from 1 to 11 kOe. The experimental technique, which gives directly the temperature derivative of the magnetization, is described elsewhere (N.V.Zavaritskiy and V.A.Tsarev, Zhur.ekspl. teor. fiz.16,432,1952). The susceptibility was found to be inversely proportional to the cube of the magnetizing field. Accordingly, the relation between magnetization,  $M$ , saturation magnetization,  $M_s$ , and magnetizing

Card 1/2

ACCESSION NR: AP4023402

field,  $H$ , was of the form  $M = M_s(1-q/H^2)$ . The temperature derivatives of  $M_s$  and  $q$  were found to be proportional to each other; i.e., the quantity  $M_{sdq}/qdM_s$  was independent of temperature and was approximately 10 for both metals. The contribution of the para-process to the magnetization of both metals was found to be of the order of  $10^{-6}$ . This is below the upper limit determined by P.Kapitza (Proc.Roy.Soc.A, 131,243,1931). Deviations from Bloch's law  $M_s = M_0(1-CT^{3/2})$  were observed at the lowest temperatures and highest fields. The values of  $dM_s/dT$  were compared with calculations of M.K.Schafroth (Proc.Phys.Soc.A,67,33,1954), based on simple spin wave theory. This theory was able to account for the deviations from Bloch's law, but in the case of iron it was necessary to assume a value of 1.2 Bohr magneton, instead of the theoretical value 2 Bohr magnetons, for the interaction constant of the spin waves with the magnetizing field. The value of the constant C in Bloch's law was found to be  $3.7 \times 10^{-6}$  for iron,  $10 \times 10^{-6}$  for polycrystalline nickel, and  $9 \times 10^{-6}$  for nickel single crystals magnetized in the [111] direction. These values are in good agreement with results of other workers, obtained at higher temperatures. Orig. art. has: 8 formulas, 5 figures and 1 table.

ASSOCIATION: None

SUBMITTED: OO

SUB CODE: PH  
Card 2/2

DATE ACQ: 10Apr64

NR REF Sov: 003

ENCL: OO

OTHER: 007

"APPROVED FOR RELEASE: 03/14/2001

CIA-RDP86-00513R001756920006-5

APPROVED FOR RELEASE: 03/14/2001

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CIA-RDP86-00513R001756920006-5

APPROVED FOR RELEASE: 03/14/2001

CIA-RDP86-00513R001756920006-5"

TSAREV, V.A.

Analysis of the reaction  $\gamma + p \rightarrow \Xi^+ + \Sigma^0$ . ZH. fiz. A 10, 121-123  
Jl '65. (ZPRA 1218)

1. Fizicheskiy Institut im. F.N.Jabedeva AN SSSR.

ABSTRACT This is a continuation of the note by the author of AF 513  
the region of higher fields (Rev. AF 513, Ser. Note V, 28, 522, 1951). The tem-

"APPROVED FOR RELEASE: 03/14/2001

CIA-RDP86-00513R001756920006-5

APPROVED FOR RELEASE: 03/14/2001

CIA-RDP86-00513R001756920006-5"

AVROV, P.Ya.; BULEKBAYEV, Z.Ye.; GARETSKIY, R.G.; DAL'YAN, I.B.; IGUMENOV,  
V.M.; TSAREV, V.A.; SHLEZINGER, A.Ye.; YANSHIN, A.I., akademik

New gas-bearing region in the Ural Mountain region. Dokl. AN  
SSSR 162 no.2\*393-396 My '65. (MIRA 18:5)

1. Institut geologicheskikh nauk AN KazSSR; Trest "Aktyubnefteazvedka"; Geologicheskiy institut AN SSSR i Aktyubinskaya geofizicheskaya  
ekspeditsiya.

LYUBIMOV, Sergey Petrovich; TSAREV, Vasiliy Alekseyevich; CHERNICHENKO,  
Yuriy Dmitriyevich; MIRONOV, T.V., red.; MATVEYEV, A.P., tekhn.  
red.

[Resources of virgin lands are for the people] Bogatstva tseliny -  
narodu. Moskva, Izd-vo "Sovetskaia Rossia," 1960. 101 p.

(MIRA 14:7)

(Reclamation of land)

(Agriculture)

L.P.3-16 BFT(1)/EMP(m.)

ACC NR: AR6000706

SOURCE CODE: UR/0124/65/000/009/B050/B050

AUTHORS: Troyankin, Yu. V.; Tsarev, V. K.

TITLE: Aerodynamics of a strong cyclone chamber with overhead gas inlet (3)

SOURCE: Ref. zh. Mekhanika, Abs. 9B327

REF SOURCE: Sb. Resp. Nauchno-tekh. konferentsiya po kompleksn. ispol'z. tepla i  
topliva v prom-sti. B. m., Kiyevsk. un-t, 1964, 97-106

TOPIC TAGS: cyclone, gas flow, aerodynamics, self similar flow, drag

ABSTRACT: The results of theoretical and experimental investigations are discussed on the character of the flow in large size cyclone chambers with overhead gas inlets. Cyclones with free gas inlets from an annular space in a lifting gas passage and circular cyclones with rosettes are considered. A method is outlined for modeling the gas dynamic processes occurring in an isothermal cyclone. It is assumed that the flow is steady and the gas motion is self-similar. Fundamental criteria are obtained to provide a similarity between the actual chamber flow and its model. Results of experimental investigations are given on the aerodynamics of the process in the model cyclone chamber with transparent walls. Flow patterns in the cyclone chamber are investigated in detail. On the basis of the above investigations recommendations are made for selecting the optimum cyclone chamber geometry from

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110000 51  
ACC NR: AR6000708

among the considered schemes. In particular, it is shown that among the investigated cyclones the best aerodynamic characteristics (lowest hydraulic resistance, most uniform velocity field, absence of stagnation points, etc) are ensured by the gas cyclone with circular blade separators. Yu. A. Lashkov [Translation of abstract]

SUB CODE: 04, 20

hs

Card 2/2

ANTROPOV, G.P.; ZYSIN, Yu.A.; KOVRIZHNYKH, A.A.; TSAREV, V.P.

Fast neutron spectrometer. Prib. i tekhn.eksp. 6 no.4:30-33  
Jl-Ag '61. (MIRA 14:9)  
(Spectrometer)

L 0110-66 EM(d)/EM(e)/EM(f)/EM(v) T, S (+)/IMP(k) 1756920006-5  
ENP(1)/EM(c) IJP(c) MJW/JD/HM

ACCESSION NR: AP5020167

UR/0135/65/008/008/0037/0038  
621.791.037

AUTHOR: Gerasimov, A. I. (Engineer); Kudasov, B. G. (Engineer); Pavlovskiy, A. I.  
(Engineer); Tsarev, V. P. (Engineer)

TITLE: Electron gun with high current stability

SOURCE: Svarochnoye proizvodstvo, no. 8, 1965, 37-38

TOPIC TAGS: welding, electron beam welding, welding gun, electron gun, gun cathode,  
tantalum cathode

ABSTRACT: A new type of electron gun for vacuum electron-beam welding has been developed. This gun is equipped with a disk-shaped tantalum cathode 1 mm thick and 8 mm in diameter, with a system for stabilizing the beam current within  $\pm 0.5$  mamp. The gun operates with an accelerating voltage of up to 50 kv. At 50 kv a beam current of over 80 mamp can be obtained. At a voltage of 40 kv and a beam current of 110—130 mamp, the beam diameter in the welding plang is 0.5—0.7 mm. Under these conditions the depth of penetration in AMts/aluminum alloy is 25 mm at a weld width of 2.5 mm. The use of a cathode made of pure tantalum instead of lanthanum hexaboride extends the service life of the gun and improves its reliability. Orig. art. has: 4 figures.

Card 1/2

[ED]

L 01810-66

ACCESSION NR: AP5020167

ASSOCIATION: none

SUBMITTED: 00

ENCL: 00

SUB CODE: MM, EC

NO REF SOV: 005

OTHER: 000

ATD PRESS: 4086

Card 2/2

YEMELIN, Ye.A.; SVISTUNOVA, G.N.; TSARFIN, Ya.A.

Simultaneous determination of sulfuric acid and phenolsulfonic  
acid in mixtures. Zav.lab. 28 no.5:548 '62. (MIRA 15:6)

1. Vladimirsksiy nauchno-issledovatel'skiy institut sinteticheskikh  
smol.  
(Sulfuric acid) (Phenolsulfonic acid)

TSAREV, Ye. Eng. Capt. and CHUGAYEV, Yu. Lt. Col.

"Television in the Control of Guided Missiles," Krasnaya Zvezda, No.59, page 3,  
10 March 1956

This article contains a popular description of the utilization of television as  
an aid to the control of guided missiles. It presents some opinions of Soviet military  
experts as to the use of television in that field.

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"APPROVED FOR RELEASE: 03/14/2001

CIA-RDP86-00513R001756920006-5

TSAREV, Ye. (Capt.) and CHUGAYEV, Yu. (Engr., Lt. Col.)

"Television in Guided Missiles," Krasnaya Zvezda, 10 Mar 1956.

APPROVED FOR RELEASE: 03/14/2001

CIA-RDP86-00513R001756920006-5"

"APPROVED FOR RELEASE: 03/14/2001

CIA-RDP86-00513R001756920006-5

TSAREV, Yu.V., kapitan meditsinskoy sluzhby

Pharmaceutical kit for first aid. Vest. protivovozd. obor.  
no.7:29 J1 '61. (MIFA 14:2)

(PHARMACY, MILITARY)  
(FIRST AID IN ILLNESS AND INJURY)

APPROVED FOR RELEASE: 03/14/2001

CIA-RDP86-00513R001756920006-5"

L 06327-67 EWT(m)/EWP(t)/ETI IJP(c) JD

ACC NR: AR6013834

(A, N)

SOURCE CODE: UR/0276/65/000/011/B046/B047

AUTHORS: Tsareva, A. A.; Fedotova, V. D.

TITLE: Several peculiarities of the heat treatment technology of bearing parts  
made of EI347Sh steel

SOURCE: Ref. zh. Tekhnologiya mashinostroyeniya, Abs. 11B284

REF SOURCE: Tr. Vses. n.-i. konstrukt.-tekhnol. in-ta podshipnik. prom-sti,  
3(39), 1964, 10-14

TOPIC TAGS: steel alloy, ball bearing steel, metal heat treatment / EI347Sh steel  
alloy

ABSTRACT: The effects of quenching temperature and exposure time on the grain size, microstructure, and hardness of steel were investigated. It was shown that exposure time at the final temperature significantly increased the grain size and coarsened the microstructure. For example, the grain size and microstructure after an exposure time of 1 min/mm at a final temperature of 1200C is coarser than after 8 sec/mm at a final temperature of 1260C. For sufficiently short exposure times, significant differences in temperature do not affect the grain size and

Card 1/2

UDC: 621.78:621.822

L 06327-67

ACC NR: AR6013834

2

microstructure. During the final heating prior to quenching of EI347Sh steel parts, an exposure time of 6—12 sec/mm (depending only on the thickness of the part) is recommended. Modifications of the heating regime prior to quenching should be performed by increasing or lowering the final heating temperature. Recommended heating regimes prior to quenching are presented for the temperature interval 1220—1240°C. A microstructure scale for ball bearing parts is developed which is used in instructions for the manufacture of heat-resistant bearing parts made of steel EI347Sh (RTM 9-62). 4 illustrations, 2 tables. [Translation of abstract]

SUB CODE: 13, 11

bearing steel 18

Card 2/2 mfc

66517

18.1150

SOV/137-59-7-15793

Translation from: Referativnyy zhurnal, Metallurgiya, 1959, Nr 7, p 228 (USSR)

AUTHORS: Sheyn, A.S., Tsareva, A.N., Fedotova, V.D., Pavlova, Z.V.

TITLE: Steels for Rings and Rolling Parts of High-Temperature Bearings, Their Properties and Heat Treatment

PERIODICAL: Tekhnol. podshipnikostroyeniya, 1958, Nr 17, pp 68 - 88

ABSTRACT: Investigations were carried out into the effect of the geometrical shape and dimensions, the fiber direction, the temperature of quench-hardening, and annealing and chilling processes on changes in the structure and dimensions during heat treatment, stability of dimensions, hot hardness and contact endurance of "EI-347", "EI-161" and other heat resistant steels. Attempts were made to replace "EI-347" steel by a heat resistant bearing steel having considerable carbide heterogeneity. For this purpose steels were investigated containing (in %): C 0.60 - 0.81; Cr 2.99 - 8.01; W 1.3 - 7.4; V 0 - 1.26; Mo 0 - 0.49. Two new steel grades "V7Kh<sup>4</sup>P" and "V4Kh<sup>4</sup>MF" were developed, suitable to operate at temperatures

Card 1/2

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66517

SOV/137-59-7-15793

Steels for Rings and Rolling Parts of High-Temperature Bearings, Their Properties  
and Heat Treatment

up to 400°C, and up to 500°C if R<sub>C</sub> was 55. The chemical composition (in %) of V7Kh4F  
steel is: C 0.6 - 0.7; Mn < 0.4; Si 0.4 - 0.6; Cr 4.4 - 5.0; V 0.4 - 0.7; Mo  
0.2 - 0.35; V4Kh4MF steel contains: C 0.7 - 0.8; Mn < 0.4; Si 0.4 - 0.6; Cr  
4.4 - 5.0; V 0.7 - 1.0; Mo 0.4 - 0.6. 14 bibliographical titles.

T.F.

4

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69281

SCV/123-59-22-91450

Translation from: Referativnyy zhurnal. Mashinostroyeniye, 1959, Nr 22, p 15 (USSR)

8.11.20 25.2000

AUTHOR: Sheyn, A.S., Tsareva, A.A., Fedotova, V.D., Pavlova, Z.V.

TITLE: Steel Grades for Raceways and Rolling Bodies of High-Temperature  
Bearings, Their Properties and Heat Treatment

PERIODICAL: Tekhnol. podshipnikostroyeniya, 1958, Nr 17, pp 68 - 88

ABSTRACT: In connection with increasing speeds in machine construction, antifriction bearings, formerly operating at temperatures of 100 - 120°C, have to operate now at higher temperatures. The temperature range of application of ball bearing steel grades increased up to 300 - 400°C and higher. In this connection the possibility was studied to apply the standard high-speed steel grades R9, R18, RK10, EI-347, and EI-161 for the manufacture of bearing parts. Based on experimental data obtained, the EI-347 grade steel was selected from the number of above-mentioned steel grades. Investigation results are given of the mentioned steel grade, considering its application in ball bearing manufacture. The fundamental criterion in the evaluation of its properties was hot hardness. A deficiency of the EI-347 grade steel is its considerable

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SOV/123-59-22-91450

Steel Grades for Raceways and Rolling Bodies of High-Temperature Bearings, Their Properties and Heat Treatment

carbide heterogeneity (although to a lesser degree than in the steel grades R9 and R18) which appears in large-size cross-sections in the form of a lattice, weakening the structural strength of the bearing parts. In order to obtain a more homogeneous, technologically suitable and cheaper steel, grades with a W-content of 1.3 - 7%, and with an increased (up to 1%) Si-content were investigated. Based on microanalysis and temperature/hardness functions, the compositions of the new ball bearing steel grades V4Kh4MF<sup>1</sup> and V7Kh4F<sup>1</sup> with a 4.5% and 7% W-content and suitable for an operating temperature of 400°C were found. The hot hardness of these steel grades is nearly equal to the hardness of higher alloyed high-speed steels. The new steel grades combine a low degree of alloying with a minimum carbide heterogeneity and a high resistance to heat and wear.

B.A.M.

✓

Card 2/2

6/13/62/000/012/041/085  
A06/A101

AUTHORS: Sheyn, A. S., Tsareva, A. A., Fedotova, V. D.

TITLE: Low-alloy heat-resistant steels for antifriction bearings and instruments

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 12, 1962, 68,  
abstract 121403 ("Tr. Vses. n.-i. konstrukt. tekhnol. in-ta  
podshipnik. prom-sti", 1960, no. 2; (22) 102 - 120)

TEXT: The authors investigated the structure and the most important properties of new low-alloy heat resistant steels of type B4X4M $\Phi$  (V4Kh4MF) 0.65% C. They determined the effect of the quenching and tempering temperature, the number of tempering processes upon the hardness of type 3И944 (EI944) and 3И945 (EI945) steels. The authors studied furthermore the changes in size during heat treatment; stabilization of the structure and size, hot hardness and creep resistance; strength properties during tensile tests, torsion and impact bending; and the magnitude of contact endurance of (EI944) and (V7Kh4F) (EI945) steels, containing 0.75 and ... (?) [Abstracter's remark: omission]. The investigation

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Low-alloy heat-resistant steels for...

3/137/62/000/012/041/085  
A006/A101

methods are described. It is shown that low-alloy type EI944 steel has a lesser carbide heterogeneity, in particular in large sections, and better general mechanical properties, than high-speed steel, and a relatively high heat resistance. The steel is recommended for the manufacture of bearings intended to operate at temperatures up to 400 - 450°C, and for dies.

G. Rymashevskiy

[Abstracter's note: Complete translation]

Card 2/2

TSAREVA, A.A.

S/137/63/000/003/012/016  
A006/A101

AUTHORS: Sheyn, A. S., Tsareva, A. A., Kabanov, M. F., Sinitsyna, T. V.

TITLE: Stainless steels for bearings intended for operation at high temperatures

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 3, 1963, 67, abstract 3I360 ("Tr. Vses. n.-i. konstrukt-tehnol. in-ta podshipniki. prom-sti", 1960, no. 4, (24) 3 - 14)

TEXT: The authors studied the effect of tempering temperature ranging from 120 to 550°C and cold treatment upon hardness; hot tests were made for  $\alpha_K$ , hardness, and scale resistance during extended time at up to 500°C; the authors determined moreover changes in the dimensions at elevated temperatures and corrosion resistance in 5%-HNO<sub>3</sub> and NaCl solutions at alternating immersion of steel grades X18 (Kh18), X18B2Φ (Kh18V2F), X18B4Φ (Kh18V4F), X18Φ1 (Kh18F1), X18M2Φ (Kh18M2F), X18MKΦ (Kh18MKF) (1.1% Co) and 3ID28 (EI928) (0.89% C, 13.6% Cr, 1.23% Be, 5.85% Ni, 4.65% Co). It was established that tempering at 400°C after cold treatment yields the same hardness as tempering at 480 - 500°C

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S/137/63/000/003/012/016  
A006/A101

Stainless steels for bearings intended for...

to maximum secondary hardness; corrosion resistance in 5% $\text{HNO}_3$ , after tempering at 400°C, is the same as after tempering at 150°C and exceeds considerably the strength of steels tempered at 500°C. Maximum hardness for all steels, except Kh18V4F, is attained after quenching from 1,125 - 1,150°C. Increased duration of holding at 400°C promotes increase in hardness of steel. Highest hardness at temperatures up to 400°C is shown by EI928 steel, tempered at 475°C. The other steel grades, except Kh18 steel with 0.8% C, have practically the same hardness at 400°C ( $R_c$  about 55) in spite of the different degree of alloying.  $a_k$  of the investigated steels in a 20 to 400°C range does practically not change. Scale-resistance at up to 400°C is equal for all steels. Corrosion resistance of Kh18F1, Kh17MKF, Kh18M2F steels in 5%  $\text{HNO}_3$  solution is the same as in standard Kh18 steel (a group of very resistant steels). Steel Kh18V4F has a resistance which is ten times less, and EI928 steel - hundred times less. Corrosion resistance of the steel in 3% NaCl solution is equal. EI928 and Kh18V4F steels are not recommended for the manufacture of stainless heat resistant bearings, intended for operation in  $\text{HNO}_3$  and its vapors; it is expedient to use Kh18 steel. Heat treatment of bearing parts should consist of preheating at 850°C, final heating to 1,150°C in a salt bath for 20 sec per 1 mm section or to 1,070 -

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Stainless steels for bearings intended for...

S/137/63/000/003/012/016  
A006/A101

1,100°C in an electric furnace for 1.0 - 1.5 min per 1 mm section; quenching; cold treatment at ~70°C for 1 hour; tempering at 400°C for 5 hours. To manufacture bearing parts operating at -200 to +100°C, Kh18 steel is recommended with a higher content of C (1.25%). After cold treatment and tempering at 120°C, Re of this steel is 63 - 64.

N. Kalinkina

[Abstracter's note: Complete translation]

Card 3/3

S/276/63/000/003/002/006  
A004/A127

AUTHORS: Sheyn, A. S., Tsareva, A. A., Kabanov, M. F., Sinitsyna, T. V.

TITLE: Stainless steels for bearings intended for operation at elevated temperatures

PERIODICAL: Referativnyy zhurnal, Tekhnologiya mashinostroyeniya, no. 3, 1963, 58, abstract 3B248 ("Tr. Vses. n.-i. konstrukt.-tekhnol. in-ta podshipnik, prom-sti", 1960, no. 4, (24), 3 - 14)

TEXT: Hardness tests were carried out after tempering at temperatures in the range of from 120 to 550°C. Heat tests were performed in the temperature range of 20 - 500°C, testing the notch toughness, hardness and scale resistance at long-time holding. Dimensional changes were tested at maximum operating temperatures, while the corrosion resistance was tested in aggressive media (5% HNO<sub>3</sub> solution, alternative dipping; 5% NaCl solution, alternative dipping). As a result of testing eight alloys it was found that, for the manufacture of bearings operating at temperatures of up to 400°C, it is expedient of using the 18 (Kh18) steel

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S/276/63/000/003/002/006  
A004/A127

Stainless steels for bearings .....

The following heat treatment is recommended: Preheating up to 850°C final heating (in a salt bath) up to 1,150°C, 20 sec holding per 1 mm of cross section; heating in an electric furnace with air atmosphere up to 1,070 - 1,100°C, 1 - 1.5 minutes holding per 1 mm of cross section, cold treatment (slow cooling of the components down to -70 - 80°C, holding at -70°C for 30 - 60 minutes, heating up to the shop temperature in the air), one single tempering at 400°C for 5 hours. For the manufacture of bearing parts operating at temperatures from -200 to +100°C, a steel is recommended which, in comparison with the Kh18 grade steel, has a higher C-content. After cold treatment and tempering at 120°C, a hardness of HRC 63 - 64 could be obtained. For manufacturing heat-resistant bearings, operating in an oxidizing atmosphere and in media containing NaCl, 3M928 (EI928) steel can be used. There are 15 figures.

T. Kislyakova

[Abstracter's note: Complete translation]

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CIA-RDP86-00513R001756920006-5"

DUBROVKIN, V.L.[deceased]; CHEKLINA, Ye.A.; VIL'UZHNAYA, Ye.A.;  
TSAREVA, A.M.; POPOV, V.V., prof., red.

[Engineering geology characteristics of loess in the Kursk  
Magnetic Anomaly] Inzhenerno-geologicheskaya kharakteristika  
lessovykh perek territorii KMA [By] V.L.Dubrovkin i dr.  
Moskva, Nedra, 1964. 198 p. (MIRA 18:2)

1. Moscow. Vsesoyuznyy nauchno-issledovatel'skiy institut  
gidrogeologii i inzhenernoy geologii.

YERSHOV, F.I.; TSAREVA, A.A.

Site of synthesis of the Venezuelan equine encephalomyelitis virus.  
Vop. virus. 10 no.3:349-351 My-Je '65. (MIRÄ 18:7)

1. Institut virusologii imeni Ivanovskogo AMN SSSR, Moskva.

YERSHOV, F.I.; ZHDANOV, V.M.; TSAREVA, A.A.

Multiplication of the Venezuelan equine encephalomyelitis  
virus in cells treated with actinomycin D. Antibiotiki no.3:  
250-255 Mr '65. (MIRA 18:10)

1. Institut virusologii imeni D.I. Ivanovskogo AMN SSSR,  
Moskva.

TSELELA, A. A.

PART I. BOOK EXPLANATION	
<b>Abdul'yan and S.S.Z.</b> <i>Kinetika po flazh-aktivatsii otseniva proizvodstva stali pri plamennoj vysokom temperaturi</i> (Use of Flame in Metallurgy). Moscow, Izd-vo M. SSSR, 1960. 316 p. British copy inserted. 4,500 copies printed.	
<b>Sponsoring Agency:</b> Academy and S.S.R. Institute metallurgical Engg. A.A. Baykov.	<b>Keywords:</b> Flame; Metallurgy; Oxygen; Produc-
<b>Report No.:</b> A.A. Baykov, Corresponding Member, Academy of Sciences USSR; M. of Publishing House, Ukr. Naukovaia Tch. Ed.; S.G. Kurchikish.	<b>Subject:</b> Metalworking.
<b>PURPOSE:</b> This collection of articles is intended for technical personnel interested in recent studies and developments of vacuum smelting practices and equipment.	<b>CONTENTS:</b> The book contains information on steel melting in vacuum induction furnaces, and vacuum arc melting, vacuum processes in terms, and depositing of metal and alloys. The functioning of apparatus and equipment, especially vacuum furnaces and vacuum smelting process is also analyzed. Personnel are invited to compare some of the articles and will receive in the table of Contents. Three articles have been translated from English. Some of the chapters, i.e., "Introduction and Basic Problems," "Melting and Pouring of Ferro-alloy Alloys in Vacuum," "Vacuum Melting," "V.A. Abramov, A.P. Balashov and V.Y. Maksimov, Casting of Crider-Al-Si-Tungsten Alloys in the Vacuum Environment," "Furnace," "H. B. Hahn, J. R. Pihl, The Effect of Helium and Carbon in Ternary and in Protective Atmospheres on the Properties of Titanium Carbide," "Properties of Hall-Barley Steel," "Investigation of the Properties of Hall-Barley Steel Manufactured in a Vacuum Arc Furnace," "Investigation of Vacuum Arc Melting," "Hall-Barley Steel Manufactured in a Vacuum Arc Furnace," "Investigation of Vacuum Melting of Stainless Steel," "Effect of Vacuum Melting on the Quality of ISDMTA Steel."
<b>PART II. READING OF STEEL AND ALLOYS IN VACUUM AND FURNACE</b>	
<b>Struzanski, A.I., Oleg, B.M. Balandina, V.N. Kuznetsov, and B.F. Pashin.</b> <i>Melting of Low-carbon Steels in Vacum Arc Furnaces</i>	70
<b>Bogolyubov, D.S., Ilyinichina, A.A., Tsvetkov and A.G. Sharov.</b> <i>Investigation of the Properties of Hall-Barley Steel Manufactured in a Vacuum Arc Furnace</i>	79
<b>Ivanov, A.V., Vassil'man.</b> <i>Vacuum Melting</i>	79
<b>Polyak, L.M., and E.L. Serebryakov.</b> <i>Melting of Stainless Steel in Vacuum</i>	79
<b>Tsvetkov, A.M.</b> <i>Properties of Alloys Melted in Vacuum</i>	83
<b>Semenov, P. Ya.</b> <i>Production of Low-carbon Steels by Slagging Under Vacuum</i>	83
<b>PART III. REDUCTION PROCESSES IN VACUUM</b>	
<b>Gal'sh, F.Y., and G.P. Sverdlov.</b> <i>Reaction of the Reduction of Nickel Oxide by Carbon in Vacuum</i>	101
<b>Peretyatko, S.D., Verner, D.V., Samoilova, I.M., Likhachev, G.I., Zverev and others of the Department of Metallurgy of Rare Metals of the Institute of Inorganic and Ceramic Materials, I. M. Ioffe (Kiev Institute of Refractory Metals and Gold)</b> <i>Combined Investigations on which this article is based</i>	115
<b>Part 9. [Polish People's Republic, Institute of Iron Metallurgy]</b> <i>Influence of Vacuum Depolarization of Ferroalloys in Vacuum</i>	124